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The Relationship Between a Specific Stress Management Program and the Reading Attitudes of First Grade Students

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THE RELATIONSHIP BETWEEN A SPECIFIC STRESS MANAGEMENT
PROGRAM AND THE READING ATTITUDES
OF FIRST GRADE STUDENTS

THESIS

Submitted to the Graduate Committee of the
Department of Education and Human Development
State University of New York
College at Brockport
in Partial Fulfillment of the
Requirements for the Degree of
Master of Science in Education

by

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Abstract

The purpose of this study was to determine whether the Kiddie QR stress management technique would affect the reading attitude of first grade students. It was also the intent of the investigation to examine whether the subjects of the treatment group, identified as least stressed and most stressed, would make gains in reading attitude.

Statistical analysis of pre and post reading attitude scores of the treatment and control groups revealed the following results:

There was no significant difference in the reading attitudes of the treatment group as compared to the control group after the former received instruction in Kiddie QR. There was also no significant difference in the reading attitudes of the most stressed subjects as compared to least stressed after each received instruction and utilized Kiddie QR.

While research indicates that alleviation of stress yields positive results, this study did not show a positive relationship between stress and reading attitude. This could be an indication that a longer relaxation period was necessary. Further investigation in this area is warranted.

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Chapter I

Statement of the Problem

Researchers such as Davis (1966) and Hefferman (1966) contend that, however unfortunate it may be, schools are often a source of emotional problems for reasons that include overcrowding, lack of individualized teaching, ability grouping and excessively high or unrealistic standards for all students, regardless of ability, interest and motivation. Since educational laws and more current reforms require that each child spend a more substantial and intensive amount of time in school, Tobias (1977) states that a reduction of stress in education would positively benefit the general population. Schools are in a position to make an important contribution not only to the academic development of children, but also to their emotional and physical development as well.

In relation to reading, stress has an adverse effect on acquisition and mastery of reading skills, as well as on attitude toward reading. Ruebush (1963) reviewed a body of literature showing that anxiety in children is negatively related to scores of tests of creativity and curiosity, indicating that those vital qualities of learning are inhibited in the highly stressed student. Penney (1965) supports the notion that anxious children are less adventuresome and avoid risk taking. Gifford and Marston (1966)

found that comprehension and reading rate in the anxious child are retarded. Merryman's (1974) study also indicate comprehension and vocabulary deficits. Since a child's self concept, sense of personal worth and attitude is strongly linked to academic performance, especially during the early years of schooling, high stress levels need to be moderated.

The consequences of excessive stress in an individual's success, personal relationships and attitude make it essential for schools to identify and remedy that stress level in the child's formative years. Proeger and Myrick (1980) and Forbes (1979) advocate that stress should be curtailed early to avoid the related anguish resulting from lack of school success and the poor attitude that accompanies it. Athey (1976) maintains that when a child finds reading a pleasurable experience, his positive attitude will rapidly become generalized to other school subjects.

Stroebe (1982) maintains that the young child seems to adapt happily, with few stress-related problems, until he/she encounters the discipline, confinement, and pressure of parental expectations that accompany starting school at the age of five or six. Hence, Stroebe and Stroebe (1977) developed the Kiddie QR concept for children three through nine to give these youngsters the ability to discriminate among body tension states, and to teach them how to reverse the physiological changes that occur when the child faces a stressful situation.

Purpose

The purpose of the study was to examine the relationship between a specific stress management program, the Kiddie QR (Quieting Reflex) Program, and the reading attitudes of first grade students.

Questions

1. Will the Kiddie QR treatment group make significant gains in reading attitude, as measured by the Primary Reading Attitude Index, during the four month study period?

2. Do the reading attitudes of those students identified to be most anxious/stressed by the Anxiety Identification Scale show more gain than those students less anxious/stressed after training in the Kiddie QR program?

Need for the Study

Stress in children can be particularly damaging, as they lack the inner resources or social support to deal with it as an adult might. As soon as they encounter one of life's inevitable stress events or perceive themselves to be in a stressful situation, their ability to cope truly breaks down. This "stressful event" can vary tremendously for each child. The stress experienced with the onset of the increasing academic demands of first grade, namely reading, can be troublesome. Sieber (1977) observes that in order to alleviate excessive stress, it is necessary to modify either the

anxiety producing situation, the perception of the situation, the reaction to the situation or all three factors. All these steps, though, are interrelated and any one can affect any of the others.

I. G. Sarason (1972) and Sieber (1977) state that the anxious students need help focusing attention to the task facing them since their fear usually directs their concentration to themselves or thoughts of failure, preventing them from keeping a positive attitude regarding the task, as well as from performing efficiently. Reworking this pattern can contribute to a more realistic appraisal of the situation and to an implementation of an effective coping strategy.

This study made use of the Kiddie QR (Quieting Reflex) Program developed by Stroebe and Stroebe (1977). It was chosen for this study to help children cope with stress by providing them with an easily learned and applied stress management technique. Listed below is a summarization of Stroebe and Stroebe's goals of the program, which are congruent to the purpose of this study. They are to:

1. Provide a kinesthetic learning experience,
2. develop cognitive thinking skills,
3. develop body awareness by differentiating between appropriate and inappropriate stress,
4. developing coping skills to reduce stress,
5. develop self-esteem.

6. develop imagination,
7. develop proper breathing.

It was anticipated that this program would help reduce stress and thereby improve reading attitude.

Limitations of the Study

It is doubtful that feelings of stress and anxiety that may have accumulated over a period of years can be eliminated during a four month treatment period, but the attempt was made to diminish them to some degree and to provide techniques to alleviate the effects of stress.

The administrators of the pre- and post- Primary Reading Attitude Index for both groups were the regular classroom teachers. For the treatment group, instructors of the Kiddie QR were also the children's classroom teachers. This may have had some effect on the anxiety level of the students. Also, the administrator of the pre- and post- Anxiety Identification Scale was a parent volunteer with whom half of the treatment group had had previous contact.

Summary

This study was an attempt to determine a significant relationship between stress and reading attitude. The intent of the investigation was also to evaluate the success of the Kiddie QR Program in stress reduction. It was theorized that alleviation of stress would improve attitude toward reading.

Chapter II

Review of the Literature

Introduction

This review will examine the research on stress in an attempt to show the need for stress management techniques. In particular, the Kiddie QR Program will be investigated as will the limited research studies involving it. Another purpose of this review is to report findings on reading attitudes and how reading and stress are interrelated.

Stress

Hans Selye, known as the "Father of Stress," defined stress as "the non-specific response of the body to any demand made upon it" (Greenberg, 1983, p. 7). Elkind (1983) said that stress is an organism's reaction to the lack of permanence in our lives. Chandler (1982) explained stress to be "a state of emotional tension."

There are many children throughout elementary schools who suffer from stress and anxiety. Benson (1975) noted that hypertension, a physiological manifestation of anxiety, was present in 15 to 33 percent of the general population and that hypertension has become an increasing concern among other age groups. Others have also concluded that anxiety is a common, serious problem for

children (Freud, 1970; Hawkes & Furst, 1971; O'Reilly & Wightman, 1971; Phillips, 1972; Ruebush, 1963; Sarason, 1972; Sermet, 1974). Proeger (1980) said that as many as 30 percent of the children in elementary schools may be experiencing excessive stress that prevents them from learning and relating effectively.

Family mobility, changing family styles, increased multicultural factors and ethnic adversity are some of the contributing factors which have had a direct impact on children and their ability to perform well in school (Wolfgang, 1982). Other major stress events of childhood, according to Chandler (1982) are death of a parent, divorce and hospitalization. Chandler (1982) also noted that the first day of school literally expands the child's world overnight. Mastering new knowledge is the most obvious source of stress at this age, he states. Chandler also found that preacademic skills, academically related behaviors and social skills all represent areas of potential stress for the child.

Hart (cited in Elkind, 1983) has listed several ways that schools stress children:

1. The classroom size is the wrong size for all activities except rote.
2. The classroom involves thousands of events and interactions, rarely is a teacher activity continuous for as long as two minutes.

Disciplinary remarks and actions may take more time than instruction. Seldom can teachers

- have a one-to-one talk with a student that exceeds 30 seconds. In actuality, none of the individualizing that gets talked about happens; simply putting a child into a different group may be called individualizing.
3. Little time is given to actual instruction in classrooms. Management, busywork, waiting, leaving, and arriving, and other diversions reduce gross instructional time to around ninety minutes a day . . . In class, attention to single students may average, per student, only six hours per year.
 4. To "cover the material," teachers need response from students able and willing to give it, and so they pay attention to about a third of the class, largely ignoring those who need instruction most, who may be written off as "failures" in the early weeks of the semester. A high percentage of failure is expected and accepted. (p. 157)

Reading Attitudes

Alexander and Filler (1976) said there is little disagreement over the importance of positive attitudes in assuring maximal success with reading. Some researchers claim that attitudes

toward reading are perhaps even more important than achievement scores. Fader (1968), in Hooked on Books, reported that student attitudes must be improved before one sees any lasting effects on performance. Yet, another researcher, Dechant (1970), found that the attitude of a pupil is often at the root of his or her reading difficulty and that the solution to the problem of the reluctant reader begins with a change of attitude. Dechant states "that how learners feel about reading is as equally important as the curriculum."

Robeck and Wilson (1974) noted a physiological basis for considering affect as an element in the learning process. A theoretical notion can also be cited for the role of affect as a primary factor in learning to read and in continuing to read. In his model of the function of attitude in the reading process, Mathewson (1976) focused on five components: attitude, motivation, attention, comprehension and acceptance. He placed attitude (the evaluative responses to aspects of reading input such as form, content, and format) as the central construct. In this model, Mathewson proposes that motivation and attitude work together to create the condition in which the child attends to and performs the cognitive processes necessary to comprehend material. Mathewson (1976) further states that if attitude is favorable and the motivation is appropriate, comprehension works at peak efficiency, with the converse holding true as well.

Reading attitudes should be considered part of an entire evaluation scheme and one important criterion of a group program's success (Epstein, 1980). A program's effectiveness should not be limited to ability scores only. A more realistic goal, Epstein found, would be to investigate skills improvement together with attitude improvement. Rowell (1967) stated that if improvement in reading skills takes place without a concurrent improvement in attitude toward reading, the progress is only partial and at best, may be of a short duration.

Students' attitudes toward reading can be measured by means of formal assessment to provide educators with a more accurate picture of students' expressed feelings. Several researchers have discovered that teachers make questionable assumptions about student reading attitudes rather than relying on actual measurement data. Most notably, Ransbury (1973) observed that teachers associated student reading attitude with intelligence or ability. A student who completed a reading assignment in an efficient and correct way was considered to enjoy reading. Yet, as Ransbury reported, children associated other behaviors such as ownership of books or the desire to read as indicative of reading attitude. Mikulecky (1978) found that teachers were not able to accurately predict student reading attitudes and that their predictions correlated more with grades than with a reading attitude measure.

Stress and Reading

Stress has a definite impact on reading. Results of the Hill and Sarason study (1966) examined in conjunction with other studies (Sarason, S. B., 1957; Sarason, I. G. 1959, 1963; Walter, Denzler, & Sarason, I. G., 1964) support their conclusion that ". . . anxiety is more strongly related to reading than to arithmetic in the early elementary school years, but that the differences weaken during the course of the elementary school years and disappear in the late elementary or junior high school years" (p. 63). A number of other studies (Hill & Sarason, S. B., 1966; Lipsitt, 1958; Rosenbury, 1953; Sarason, S. B., Davidson, Lightgall, Waite & Ruebush, 1960; Swinn & Hill, 1964) clearly indicate that highly anxious people ranging from elementary through college age are self disparaging and lacking in self confidence. They tend to blame themselves for failures and disappointment and possess a poor self image, both of which have an adverse effect on attitude. Proeger and Myrick (1980) cite findings by Cattell and Scheier (1961) that support this evidence that excessive anxiety is associated with guilt, school inadequacy, and lack of self assuredness.

Poor readers are confronted with numerous other problems in addition to their skills deficits. They view reading as a threat and exhibit a fight or a flight stress reaction when they read. These responses are significant because they are potentially

disruptive to future experiences in reading (Gentile & McMillan, 1987).

Poor readers also display self deprecation, lack of clear goals or values, vulnerability and disparagement by others, immature relationships with parents or teachers, lack of insight into personal problems or pervasive depression (Gentile & McMillan & Swain, 1985; Lamb, 1985; Maxwell, 1971).

Researchers have provided detailed descriptions of students' adaptive stress reactions to reading. Gentile and McMillan (1984, 1987) and Swain (1985) analyzed the records of 500 students with reading difficulties referred to a diagnostic and remedial center. All students were given a full multi-disciplinary assessment with none diagnosed as having neurological, physical or emotional problems severe enough to warrant outside referral. What did emerge, though, was a spectrum of fight or flight, avoidant behavioral categories, ranging from resistance and rage to immobilization and retreat (Gentile & McMillan, 1987).

Bandura (1977), Kanfer (1980) and Runck (1982) advocated that students whose responses to reading are fight or flight need to be taught three major self regulatory skills: goal setting, self incentives, and self monitoring.

Teachers also view anxious students in a less favorable light. An investigation by Cowen, Izzo, Klein, Trost, and Zax (1965) indicated that teachers reacted negatively to anxious students

perceiving them as less well adjusted and possessing a number of negative personality traits such as over-dependency.

Since reading is strongly emphasized in the early years of school, many researchers have supported the implementation of educational programs aimed at providing stress management skills in their discussions of the implications of their studies. Patten cited Algozzine (1979), Andrews (1966), and Black (1974) as advocates of such programs, while Gottfried lists Martin, Meyers, and Phillips (1972) as supporters of similar programs. Goodwin and Payne (1981) and Yadusky-Holsham and Holohan (1983) are also among those who have concluded as a result of their research findings that the need for aiding students in expanding their knowledge of anxiety and its effects and providing them with coping techniques is of primary importance if schools are to produce competent readers with a positive attitude.

Kiddie QR - Quieting Reflex

The Quieting Reflex concept was discovered in 1974 as an outgrowth of an attempt to use biofeedback to treat stress disorders (estimated to be up to seventy percent of all medical complaints) in an outpatient clinic population ranging from age seven to avoid and lessen stress illnesses (Stroebe & Stroebe, as cited in Humphrey, 1985).

In application with well over a million adults under professional supervision since 1974, the Quieting Reflex has

proven to be of significant value in managing stress problems in approximately eighty percent of the population (Stroebe, 1972). Charles and Elizabeth Stroebe, the developers of the Quieting Reflex concept, further state that young children seem to adapt happily, with very few stress-related problems, until they encounter the discipline, confinement, and pressure of parental expectations that accompany starting school at the age of five or six.

While limited studies involving Quieting Reflex have been conducted to date, the controlled study within the Mesa, Arizona school system demonstrated remarkable effectiveness in classroom settings (Stroebe & Stroebe, as cited in Humphrey, 1985). Disorbio (1983), in his intervention study, demonstrated that school age children used the Quieting Reflex to moderate their stress responses.

Petosa and Oldfield (1985) reported in their findings that in a pilot study of 296 children, ages five to twelve, who had been introduced to the Quieting Reflex as the comprehensive model of psychophysiological relaxation, 89% showed an increased frequency of "on-task" behavior in the classroom.

Students must learn to deal directly with the stress they experience during reading by reappraising the threat and developing ways of coping with it (Gentile & McMillan, 1987). Stress reducing methods called direct or self regulating coping skills, of which Kiddie QR is one, must be taught as diligently as functional

reading skills because they produce long term positive effects during reading instruction (Blackham & Silberman, 1980; Hilgard, Atkinson & Atkinson, 1975). Edwards (1981) concludes that "teaching the Quieting Reflex as a coping skill for life" is one answer to the pressing problems faced in the 1980's by health care and teaching personnel.

Summary

Stress is an emotional process that has negative results when the person in stress lacks the appropriate coping skills and is, therefore, lacking in confidence, thus affecting adversely his or her attitude.

Researchers have established that stress negatively affects the reading achievement as well as the attitude of the child.

Stress management techniques, and in particular the Kiddie QR Program, are one way to reverse the effects that anxiety, tension and stress have on the learner.

Chapter III

Design of the Study

Purpose

The purpose of this study was to examine the influence of a specific stress management program, Kiddie QR (Quieting Reflex) Program, on the reading attitudes of first grade students. The particular intent of this investigation was to observe whether a significant change in reading attitude was made by first graders following four months of practicing the Kiddie QR Program.

Hypotheses

The following null hypotheses were investigated in this study:

Null Hypothesis 1. There will be no statistically significant difference in the mean reading attitude score after a four month treatment period between a random sample of 45 students instructed in and utilizing Kiddie QR and a random sample of 45 students having had no instruction in and no utilization of Kiddie QR. This will be tested at the 95% confidence level.

Null Hypothesis 2. There will be no statistically significant difference in the mean reading attitude score after a four month (treatment) period between those students in the treatment group who were identified to be most stressed and those identified to be less stressed. This will be tested at the 95% confidence level.

Methodology

Subjects

Ninety first grade students from a suburban area of Western New York who attend a public school served as subjects. The students were of mixed ability levels and four different first grade classes. The students of two teachers trained in the Kiddie QR Program formed the treatment group, while two other classes formed the control group.

Instruments

1. Primary Reading Attitude Index (Powell, 1971) was used to measure the pre and post reading attitudes of each student in the treatment and control group.

2. Anxiety Identification Scale (Myrick & Proeger, 1980) was used to determine the pre and post anxiety level of each student in the treatment group, as well as to identify those students least and most stressed.

Procedures

All ninety students were pretested with the Primary Reading Attitude Index. The treatment group was given the Anxiety Identification Scale. The treatment group, consisting of two first grade classes, then received eight, twenty minute training sessions in Kiddie QR Program over a two week period, with each session covering two of the 16 elements. Kiddie QR, which stands for Quieting Reflex, is a technique meant to help children three

to eight years old cope with stress. It involves deep breathing and muscle relaxation taught in concepts to which children of this age group can respond. The concepts first teach children what stress is and then how to relieve it. The 16 elements of Kiddie QR are described in Appendix A. The training was done by two matched teachers, both of whom had equal years of teaching first grade, similar personalities and teaching styles, as well as fairly equal experience with and knowledge of the Kiddie QR Program. Commercially produced tapes from the Kiddie QR Program were used in the training.

After all the training sessions were completed, the subjects in the treatment group then reviewed and practiced the QR technique three times daily for two weeks. This practice was done at intervals chosen by the two individual teachers.

Following this practice period, the subjects in the treatment group were asked by the teacher to use the QR technique prior to and at the conclusion of the daily basal reading lesson. This application period lasted approximately three and one-half months.

At the conclusion of this study, all subjects were given the Primary Reading Attitude Index and the treatment group was given the Anxiety Identification Scale.

Analysis of Data

An independent t test was used to compare the mean reading attitude score between both treatment and control groups.

An independent t test was also used to compare the mean reading attitude score between the most and least stressed treatment subjects.

Summary

This study was designed to investigate the effects of Kiddie QR on the reading attitude of first grade students. The Primary Reading Attitude Index was used to measure reading attitude of all 90 subjects, while the Anxiety Identification Scale was the instrument used to measure anxiety of the 45 treatment subjects, who received the Kiddie QR instruction. Independent t tests were used to measure the mean reading attitude scores between the treatment and control groups, as well as to compare the mean reading attitude scores between the most and least stressed treatment subjects.

Chapter IV

Findings and Interpretation of Data

Purpose

The purpose of this study was to determine whether the technique of Kiddie QR (Quieting Reflex) would have a significant affect on the reading attitudes of first grade children. It was also the intent of this investigation to determine whether either or both groups of least stressed and/or most stressed children within the treatment group demonstrate a significant change in reading attitude as a result of Kiddie QR.

Analysis of Data

An independent t test was run on the pre Primary Reading Attitude Index scores revealing that the performance of the groups was not significantly different at the outset (See Table 1).

Table 1

t test of Differences Between Performance of Treatment
and Control Groups on the Pre Primary Reading
Attitude Index

Sample	N	Mean	s.d.
Treatment	45	76.533	14.682
Control	45	78.000	9.604

$H_0: \bar{x}_t = \bar{x}_c$
 $t (df = 88) = -0.561 (P = .5794)$
 $S.E. = 2.615$

Null Hypothesis 1

The stress management technique of Kiddie QR does not significantly change the reading attitude of first grade children.

An independent t test failed to reject the null hypothesis indicating that Kiddie QR did not have a significant effect on reading attitude (See Table 2).

Table 2

t test of Differences Between Performances of Treatment and Control Groups on the Post Primary Reading Attitude Index

Sample	N	Mean	s.d.
Treatment	45	80.600	10.243
Control	45	80.133	9.543
$H_0 = \bar{x}_t = \bar{x}_c$			
$t (df = 88) = 0.224 (P = .6775)$			
S.E. = 2.087			

Null Hypothesis 2

The children designated least stressed and most stressed by the pre anxiety Identification Scale formed two new groups. An independent t test was run on the pre Anxiety Identification scores revealing that the performance of the groups was not significantly different before treatment (See Table 3).

Table 3

t test of Differences Between Performances of Least Stressed and Most Stressed Groups on the Pre Anxiety Identification Scale

Sample	N	Mean	s.d.
Least	11	76.182	14.634
Most	14	75.929	15.449

$H_0 : \bar{x}_L = \bar{x}_M$
 $t (df = 23) = .042 (P = .4563)$
 $S.E. = 6.084$

An independent t test failed to reject the null hypothesis indicating that Kiddie QR did not significantly affect the reading attitude of either the least stressed or most stressed treatment subjects. Table 4 summarizes these data.

Table 4

t test of Differences Between Performances of Least Stressed and Most Stressed Groups on the Post Primary Reading Attitude Index

Sample	N	Mean	s.d.
Least	11	82.727	11.073
Most	14	81.000	10.444

$H_0 : \bar{x}_L = \bar{x}_M$
 $t (df = 23) = .400 (P = .6651)$
 $S.E. = 4.320$

Summary

Analysis of the data has failed to show an effect of Kiddie QR on reading attitudes of first graders.

Chapter V

Conclusions and Implications

Purpose

The purpose of this study was to determine whether the Kiddie QR stress management technique would significantly effect the reading attitude of first grade students. It was also the focus of this investigation to observe whether the subjects within the treatment group identified to be the least stressed and most stressed would make notable gains in reading attitude.

Conclusions

The results of this investigation demonstrated that the Kiddie QR stress management technique did not have a significant effect on the reading attitude of the first grade subjects. While the pretest reading attitude mean score of the treatment group was somewhat lower than that of the control group and the posttest reading attitude mean score of the treatment group was slightly higher than that of the control group, the differences were less than significant.

During the course of the first grade year, many changes occur in the child as a reader. These changes may have had an effect on the childrens' reading attitudes which were reflected in the scores of both groups.

As for the least stressed group of 11 students and the 14 identified to be most stressed within the treatment group, again, no significant differences in reading attitude resulted in their having been instructed in and having had the opportunity of utilizing the Kiddie QR stress management technique for the four month study.

It should be noted, however, that in each group of least and most stressed subjects, 55% and 64%, respectively, made improvements in reading attitude during the course of the study.

While it was not a question of the study, it was concluded in a dependent t test that no significant increase was made in the pre- and posttest anxiety scores for either group.

It should be concluded that while this study produced no positive relationship between Kiddie QR and reading attitude, neither should be ignored by educators as they structure the academic and affective plan for students.

Implications for Research

Since a four month stress reduction program did not produce a significant change in reading attitude, it would be valuable to determine if the effects of a longer term study would.

The selection of the most successful stress management techniques for various age groups, socioeconomic populations, personality and stress types would be beneficial. The use of combined strategies may prove more effective than just one.

It was interesting to note that the control group had an extremely high number of excellent readers. Most of these readers possessed high pretest scores on the attitude test. It would be wise if this study were repeated, more closely matching the subjects.

Two suggestions for future research would be to examine the presence and degree of anxiety via a different test and to look at the relationships between anxiety and achievement level or anxiety and self-concept to determine if significant correlations occur.

Finally, another consideration for possible investigation is the relationship of anxiety to performance in various academic subjects. The nature of the impact of anxiety on different disciplines could have many important educational implications for teachers.

Implications for Classroom Practice

Based on the findings of this study, it would appear that incorporating the instruction and utilization of Kiddie QR into the classroom's educational and/or attitudinal program would not be of great benefit to students and teachers alike. However, other research has shown that with programs such as Kiddie QR, many benefits can be gained.

It would be important not to dismiss the addition of a stress management technique into the classroom setting. From

teacher observation relative to this study, it was determined that Kiddie QR did have a calming effect on the children. It was also noted that the behaviors and on-task performance of the children in the treatment group also showed improvement.

In reviewing the literature on stress management programs for children, it is mentioned that much is gained if the program is started early on in the school year and continued throughout the year. It would make sense that the classroom teacher take this into consideration when implementing this type of program. The teacher should also give ample time for practice and application.

Finally, it would be extremely important to target at-risk students as soon as possible and to begin a stress management program with this type of student, as well as other anxiety-prone individuals who may stand to gain from reducing anxiety in their school, home and personal relationships.

Summary

The findings of this study illustrate that significant changes did not occur in reading attitude with the implementation of the Kiddie QR stress management program.

Neither the least nor most stressed children within the treatment group exhibited significant changes in reading attitude.

While positive benefits can be derived from implementing a stress management program in the classroom setting, it may produce more significant changes in areas other than attitude and a longer

period of study is necessary to fully determine the benefits of a stress management program.

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APPENDIX A

Kiddie QR

APPENDIX A

Kiddie QR

Element One

1. Present Element No. 1 to children - MY Friend, QR

Introduce QR as a body friend. Make the children aware of the concept that QR (Quieting Reflex) lives inside every person.

2. Play the tape. Experience and discuss feelings involved, what using the element did for the children, and appropriate items for use of this body element.
3. Before you go on to Element 2, reinforce the concept of self responsibility. Help students become aware of the power they have within themselves to make their minds and bodies feel good.

Element Two

1. Present Element No. 2 to children - Finger Houses

This element emphasizes that breathing is the basic rhythm of life and that proper breathing patterns are vital for healthy bodies.

The element will provide exercises that show children the difference between proper and improper breathing, and will teach children how to control their breathing and to lessen stress through QR. Finger Houses will enable children to feel the good, warm air within their bodies.

2. Play the tape. Experience and discuss feelings involved, what using the element did for the children, and appropriate times for use of this body element. (For example - They might want to use this when they become frightened or upset.)

3. Before going on to Element No. 3 emphasize the fact that when their bodies feel upset, they can do something to make themselves feel better. Remind them that although they cannot see their breath, they can feel their warm body friend inside each of them - and this body friend is always present.

Element Three

1. Present Element No. 3 to children - A Finger Trip with QR
Encourage exploration of facial bones and muscles so children can differentiate between tense and calm states. This will show the children how inner emotions can cause facial bone and muscle tensions.
2. Play the tape. Experience and discuss with the children the feelings involved, what using the element did for them, and appropriate times for using this body element.
3. This exercise can be combined with a Social Studies lesson in which children can compare bone structures of people in other cultures. It can be used as a science lesson to observe and touch a skeleton for comparative study. As an art project pictures of the faces can be drawn to show differences between mad faces and happy faces. Before going on to Element No. 4 emphasize how one's feelings of sadness, happiness, or anger affect the tightness in our facial muscles.

Element Four

1. Present Element No. 4 to children -- QR and Little Fish

This element is used to create an awareness of an important

QR step - "letting the jaw go limp." Talk with children about fish and the easy, loose movement of his body and mouth.

Children learn to release tension from the TMJ (temporomandibular joint).

2. Play tape, experience and discuss feelings involved, what using the element did for the children, and appropriate time for use of this body element. For example, children who are worried about their physical appearance may identify with the comments about Fish and his size. Discussion dealing with confidence and self-concept may be talked about at this time.
3. Encourage children to talk about contrasting feelings of a tight mouth, chin, and jaw posture in contrast to loose, comfortable south position of Little Fish. Remind the children of their new body friend! A teacher can combine the science lesson with the body awareness study.

Element Five

1. Present Element No. 5 to children - Magic Breathing Holes

This element reinforces the idea that breathing is the basic

rhythms of life. It shows that our entire bodies are breathing mechanisms, not just the nose and mouth. This element also

introduces feelings of moving warmth and heaviness in the body.

2. Play the tape, experience and discuss feelings involved, what using the element did for the children, and appropriate time for use of this body element. Because children are told to "see with their eyes closed," it must be remembered that all children do not have the same imagining capacity. Give children freedom to develop their own good feeling images.
3. Kids can trace one of their feet and draw in their Magic Breathing Holes. You may also suggest they practice this exercise at bedtime, wake up time, or when they are upset or feeling ill. Also point out it can be done in several places, and at times when they are feeling restless, tense, or angry.

Element Six

1. Present Element No. 6 to children - Magic Jaw String
This element teaches children an awareness of tongue thrusting and jaw tension, which create unconscious tension. At this time briefly review the names of previous "body friends," also.
2. Play the tape, experience and discuss feelings involved, what using the element did for the children, and appropriate time for use of this body element. This exercise is vital in learning the jaw drop concept of QR.
3. Before going on to Element No. 7, emphasize the importance of taking the pressure off the jaw, because when we do this we also take the pressure or tight feelings away from our entire face and relieve tension.

Element Seven

1. Present Element No. 7 to children - This is a Generalization Exercise involving Magic Jaw String/Breathing Holes. This is when the children actually do their first QR. Element 7 is divided into three parts - A, B, C. Each part is a reinforcement exercise of the QR Generalization.
2. Play the tape, experience and discuss feelings involved, what the element did for the children, and appropriate time for use of this body element.
3. Children should be encouraged to pick specific times of the day when they will practice their QR. Remind them that QR is a combination skill of their body friends.

Element Eight

1. Present Element No. 8 to children - QR's best friend, Bubble pipe. This exercise gives children an opportunity to discuss their problems or worries, as well as happy moments spent with friends.
2. Play the tape, experience and discuss feelings involved, what using the element did for the children, and appropriate time for use of this body element.
3. Draw pictures of Bubble Pipe and his worries to help children relieve tensions. End Element No. 8 with QR.

Additional Exercise in QR Training (Elements 9-16) to Enhance Children's Awareness of Their Bodies. These exercises focus in on faculty bracing efforts in various muscle areas of the body.

Element Nine

1. Present Element No. 9 - Fighty Fists and Finger Balloon

This exercise shows how dysponesis (Tensing or bracing mechanism of the emergency response) produces feelings of being uptight or creating and intensifying body pain.

2. Play the tape, exercise and discuss feelings involved, what using the element did for the children and appropriate time use of this body element. Remember the sequence in this exercise is very important - first beginning with the inappropriate bracing exercise of Fighty Fists, then letting the children sense a release of tension in the Finger Balloon exercise.

3. Discuss with children situations where they tend to brace - such as specific classroom anxieties, etc. Have children end session with a QR.

Element Ten

1. Present Element No. 10 - Octopus

It is important, however, to first review Fighty Fists and Finger Balloon before introducing Octopus so that kinesthetic sequence is best remembered by the child. The objective for this element is a kind of momentary flowing release of muscle tension throughout the body.

2. Play the tape, experience and discuss feelings involved, what using the element did for the children, and appropriate time use of this body element.

3. A very meaningful time to use the Octopus Float in the classroom is to do the exercise before and during an extended lesson, or during performance tests of any kind. End the session with a QR.

Element Eleven

1. Present Element No. 11 - Octopus and Magic Breathing Fingers.
This exercise provides imagery, combining breathing with the flowing sensation of heaviness and warmth throughout the body.
2. Review sequence of Fighty Fists, Finger Balloons and Octopus.
Play the tape, experience and discuss feelings involved, what using the element did for the children, and appropriate time use of this body element.
3. Whenever children become aware of a bracing tendency, remind them to use this exercise to relieve the tensions. End sessions with a QR.

Element Twelve

1. Present Element No. 12 - QR The Muscle Man
This exercise enhances awareness of the relationship between thoughts and feelings and muscle tension levels.
2. Play the tape, experience and discuss feelings involved, what using the element did for the children, and appropriate time use of this body element.

3. Talk with children about how our thoughts can tighten up areas in our bodies. Combine science and health lessons to learn more about musculature in children's bodies - the voluntary and involuntary systems. Encourage children to share stories of terrible moments and think about muscles that became tense at that time. Talk about the game "Freeze" and the body muscles we tighten. End the session with a QR.

Element Thirteen

1. Present Element No. 13 - QR and Rigid Robot

The objective of this element is to experience "body rigidity."

The children learn to contrast the feeling of body tenseness and calmness through the character of Rigid Robot. Let the children imitate Rigid Robots's actions.

2. Play tape, experience and discuss feelings involved, what using the element did for children, and appropriate time for use of this body element.
3. Ask children how they could teach Rigid Robot to feel more at ease, and let them decide how they would teach their body friend, Rigid Robot, the generalization exercise. This is an excellent means of developing problem-solving, and also serves as a review of the other elements. End session with a QR.

Element Fourteen

1. Present Element No. 14 - QR and Grouchy Face

The object of this element is to reinforce the idea that the children have discovered their own body friends and are capable of using coping mechanisms whenever they feel stressed or nervous. This also shows how a negative attitude toward life may produce body tenseness, unhappiness, and anger.

2. Play tape, experience and discuss feelings involved, what using the element did for the children, and appropriate time for use of this body element.

3. At the end of this lesson, exchange experiences and talk about alternatives for Grouchy Face. End the session with QR.

Element Fifteen

1. Present Element No. 15 - QR and My Body Bike Cycle

The objective of this element is to make children aware of appropriate and inappropriate mental arousal levels in their bodies. It also helps them to be aware of how unconsciously they teach their bodies to become excessively aroused without even realizing it.

2. Play tape, experience and discuss feelings involved, what using the element did for the children, and appropriate time for use of this body element. The Body Cycle is a practical exercise for children to use to understand body arousal levels.

3. If possible, let children experience gearing up and gearing down their bodies, thus trying various body speeds so that they can experience and discuss sensations and exertion levels. Let children talk about what makes them aroused and what does not. Have them make body energy saver goals for their specific needs.

Element Sixteen

1. Present Element No. 16 - My Very Own Good Feeling Self

This element reinforces the concept that the body is basically good, and that with care and the use of QR elements, all children can have balanced, healthy bodies. It shows children how to balance stressful states with unstressful states, in other words, it teaches children how to achieve homeostasis. The children should, after this lesson, also understand that wear and tear on their bodies reduces creativity as well as performance.

2. Play tape, experience and discuss feelings involved, what using the element did for the children, and appropriate time for use of this body element.
3. Have children build a body blockhouse and let them see the stress in action. First have them build an unhealthy blockhouse by using blocks that are negative (Fighting Fists, Rigid Robot, etc.). Then for contrast, have them build a healthy blockhouse by using healthy blocks (Magic Breathing Holes, Octopus, Magic Jaw String). As a culminating activity, construct a Body House whose foundations

is a healthy body. Add stress blocks, healthy blocks, and QR.

Emphasize to children they should do QR regularly.

(Stroebe, 1980)

APPENDIX B

Primary Reading Attitude Index

APPENDIX B

PRIMARY READING ATTITUDE INDEX

(Read Aloud the following to the class.)

I want to find out what you think about reading for fun. You can help me by listening to what I read and then making circles to show how you feel about what I have read. (Draw three faces on chalkboard--one smiling, one plain, and one frowning.)

Here are three faces: a happy face, a plain face, and an unhappy face. If someone gave you a piece of candy, which face shows how you would feel.

If someone hurt your feelings, which face shows how you would feel? Yes, (pointing) the unhappy face shows how you would feel.

If someone gave you a cat, which face shows how you would feel? Well, if you like cats, (pointing), this face shows how you would feel. If you do not like cats, (pointing) this face shows how you would feel. But if you are not sure, the plain face (pointing) shows how you would feel.

Now, I am going to give out some papers. (The administrator should keep one copy of the answer sheets to illustrate which page is being used for each item.)

Write your name on the line on the top page. (The Data Sheet should be filled in by either the teacher or administrator.)

Now turn to the next page, the green sheet. I will read the story twice. If you want me to read it again, I will do so. Follow the pictures as I tell the story.

(Three faces should be added to each of the following items.)

SAMPLES:

1. You are playing.
Someone takes away your toy.
Circle the face which shows how you feel.
 2. You are playing outside with a friend.
Your mother calls you in to lunch.
Circle the face which shows how you feel.
-
1. You are sitting at home.
You are thinking about what to do.
You take out a book to read.
Circle the face which shows how you feel.
 2. There's a lot more time left in reading class.
The teacher says that you may do more pages in your
reading workbook.
Circle the face which shows how you feel.
 3. You have time to read before you go to sleep.
You choose a book to read or look at.
Circle the face which shows how you feel.
 4. You are playing outside.
You go in the house to read or look at a book.
Circle the face which shows how you feel.
 5. The school library has just got a lot of new books.
Circle the face which shows how you feel.
 6. Your father is reading the newspaper.
He lets you look at some of it.
Circle the face which shows how you feel.
 7. Your teacher is reading a poem to the class.
Circle the face which shows how you feel.
 8. Tomorrow the class will have more time for reading.
You will do more work in the reading workbook.
Circle the face which shows how you feel.
 9. You have books to read at home.
Circle the face which shows how you feel.

10. You have heard or read a story.
You draw a picture about that story.
Circle the face which shows how you feel.
11. Your class is having a sharing time.
You tell about a book which you have read or heard read aloud.
Circle the face which shows how you feel.
12. You are playing "make believe."
You make believe you are someone from a story you have
read aloud or heard read aloud.
Circle the face which shows how you feel.
13. You are at home having dinner.
Your parents ask you if you have read or heard a good
story.
Circle the face which shows how you feel.
14. You have written a story about yourself.
The teacher lets you read it to the class.
Circle the face which shows how you feel.
15. You are going to the school library to hear a story.
Circle the face which shows how you feel.
16. There's a lot more time left in reading class.
The teacher says that you can read more in your
reading book.
Circle the face which shows how you feel.
17. You can either listen to someone read a story or see
the story on television.
You listen to someone read the story.
Circle the face which shows how you feel.
18. Your mother goes shopping.
She buys you a book.
Circle the face which shows how you feel.
19. You and your friends are going to do something together.
You decide to look at a book.
Circle the face which shows how you feel.
20. The class is doing arithmetic (mathematics).
It is time to listen to a story.
Circle the face which shows how you feel.
21. Tomorrow the class will have more time for reading.
You will be able to look at any books in the room.
Circle the face which shows how you feel.

22. You are eating breakfast.
You read the cereal box.
Circle the face which shows how you feel.
23. You have learned a poem.
You say it to the class.
Circle the face which shows how you feel.
24. Tomorrow the class will have more time for reading.
You will read more in your reading book.
Circle the face which shows how you feel.
25. You see some of your friends.
You tell them about a book you have read or heard
read aloud.
Circle the face which shows how you feel.
26. You are looking at a magazine.
Circle the face which shows how you feel.
27. You are looking at pictures in a catalogue.
Circle the face which shows how you feel.
28. You have grown up.
You have read a lot.
Circle the face which shows how you feel.
29. You are going to the public library.
Someone reads a story.
Circle the face which shows how you feel.
30. You have time to do what you want to do.
You make up a poem.
Circle the face which shows how you feel.
31. Your class is doing reading and arithmetic (mathematics).
You are doing your reading.
Circle the face which shows how you feel.
32. You are trying to make a rhyme.
Circle the face which shows how you feel.

For further information, see Powell, A. Primary Reading Attitude Index with Administrator's Directions. 1971. (ERIC Document
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APPENDIX C

Anxiety Identification Scale

APPENDIX C

Anxiety Identification Scale

Check how you feel compared to other children.

	More than other <u>children</u>	About the same as other <u>children</u>	Less than other <u>Children</u>
1. It is hard for me to go to sleep at night.	_____	_____	_____
2. I worry a lot.	_____	_____	_____
3. I get headaches.	_____	_____	_____
4. I am secretly afraid of a lot of things.	_____	_____	_____
5. My feelings get hurt easily.	_____	_____	_____
6. I am nervous.	_____	_____	_____

Would you like to learn to relax more?

yes____ Not sure____ no____